

most entirely. He was seen by a neighbouring physician who found the hemorrhage very profuse, and which was not controlled entirely until after a period of eight hours, the amount of blood lost could not be accurately ascertained. I saw him twenty hours after the receipt of injury, he was then suffering much from shock and consequences of hemorrhage, evidenced by the hippocratic countenance, coldness of cutaneous surface, vomiting, and being pulseless; his condition was almost one of exsanguination; there was then no hemorrhage of consequence. Amputation was determined upon, but owing to his extreme anæmia, and for other reasons unnecessary to mention, it was postponed for a week, after which period, the portion of foot anterior to the wound was found to be gangrenous. The leg was amputated by Dr. Lowe just above the ankle, by the circular method; *no hemorrhage followed the operation*, and after watching the stump for several hours it was found unnecessary to apply even a single ligature; the patient reacted well and progressed, we are told by his friends, without an unfavourable symptom to complete recovery.

What agent rendered the operation bloodless? I cannot account for it, except by *thrombosis* of the anterior tibial, posterior tibial, and peroneal arteries and their recurrent branches; the state superinduced by anæmia which rendered the blood hyperinotic, as in formation of heart clot after a profuse *post-partum* hemorrhage.

DOMESTIC SUMMARY.

Quinia as a Parturient.—Dr. WM. L. LINCOLN, in his report on Obstetrics, made to the Minnesota State Medical Society, states that he confidently believes that quinia is a “valuable agent when dilatation has taken place, and the pains are not strong; we are sure that we have observed labour materially shortened by the administration of five grains of quiniæ sulph. And again, when the pains are irregular in regard to duration and interval, we have observed, in half an hour after the exhibition of the dose of quinia, regular pains as to strength and interval. One or two marked cases have come under our own observation, which bear upon the subject matter under consideration.

On the tenth day of June last we saw a lady who supposed herself to be in the fifth month of pregnancy, who had been flowing more or less all the time for three weeks, and had been taking remedies to prevent miscarriage, but who for the preceding twenty-four hours had been having occasional labour pains. An examination revealed a dilating os, but the pains were very irregular, sometimes occurring every four minutes for three or four pains and then there would be an interval of twelve minutes or more.

After watching the progress of labour for an hour, she got six grains of quinia, and in about half an hour we had the extreme satisfaction of observing that the pains were regular and strong until labour was completed, which occupied about an hour and a quarter. The doctrine has been advanced that if it is so certain a parturient it would be unsafe to administer quinia to pregnant women as a remedy in malarial fevers, for at any time the uterus might be stimulated to take on expulsive contractions. So far as we have noticed, no writer on the subject of malarial fever, gives a word of caution on the subject in days gone by, and we suppose that pregnant women have swallowed their portion of the potent drug in question; and if such are the facts, the question arises, why did not the whole malarial region of our land become depopulated in a generation, from miscarriage?

In the month of September two cases presented themselves for a test in this matter, and although the number is too small to be of much moment, yet they

seemed to be fair cases for trial. Mrs. W. was the subject of quotidian fever, and desired to have it broken up at once, as she expected to be in labour "any day." She said she was a hard subject to cure of ague, having succeeded in shaking every day, for five weeks, at one time in Illinois some four years previous. She took thirty grains of quinia sulph. in the twelve hours preceding the time for her next chill, and had no subsequent chill or fever. Her confinement was thirteen days later.

A few days subsequent, Mrs. B., reckoning that she was within two weeks at furthest of confinement, being ill of a tertian ague, took twenty grains of quinia in the twelve hours preceding her anticipated chill, breaking the fever just three weeks previous to her accouchement.

We offer these cases not to support a theory, but as simple facts to show that in those cases it proved safe to prescribe quinia in potent doses to pregnant women.—*Trans. Minn. State Med. Soc., 1873.*

Paracentesis Thoracis.—Dr. BOWDITCH, of Boston, in a very interesting letter to Dr. Allbutt, of Leeds, England, published in *The Practitioner* for April, 1873, gives the following as some of the general conclusions to which his experience of this operation has led him.

"*First.*—I always operate *first* with a very small exploring trocar and canula, which latter can be attached to a suction pump. This is the general rule, and has not been departed from for years, owing perhaps to the fact that physicians in Boston and its vicinity rarely allow pus to remain so long as to 'point'—we operate long before that period arrives. I thrust the trocar in *fearlessly and quickly*, so as to avoid carrying the pleural false membrane before the canula instead of transfixing it. I choose a point in the back on a line with the angle of the scapula and between the eighth and ninth or ninth and tenth ribs, and at least an inch and a half above a horizontal line drawn through the lowest point at which the respiratory murmur is heard in the other lung. I draw fluid slowly, but as continuously as possible, as long as I can do so, or until severe pain or stricture over the chest, or any serious discomfort of any kind, comes on. Coughing does not always induce me to desist; but a severe harassing cough checks further operation. After the operation I advise entire rest for twenty-four hours at least. I have not been obliged to use opiates except once or twice, to check an *extravagant* cough; I should never check a mild one, as it is usually the healthful result of expansion of the lung.

"*Second.*—No amount or character or complication of disease, either cephalic, thoracic, or abdominal, prevents me from operating when I find a large effusion, or any effusion that I think is adding distress to a patient already very ill. In some such cases I operate simply to give relief, and I do so as freely as I would use a subcutaneous injection of morphia, prescribe a blister, or a cathartic. I had one case, in a very aged man who had had manifest cardiac disease, but who, at the time I was called to him, had been unable to lie down for two or three weeks, with general dropsy; the legs, abdomen, and the left pleura being all distended. Tapping the chest and drawing away over two quarts of serum relieved all the severe symptoms, and he lived for years afterwards. I therefore now *hope* for *more* than simple relief, even in the worst cases, and in those in which the prognosis would undoubtedly be for a fatal result unless relief can be obtained by the operation.

"*Third.*—Age and sex, and even the existence of pregnancy, I deem of no importance when considering the question of thoracentesis in a severe case. The youngest babe and the octogenarian, the strongest and fattest of men, with chest parietes so thick that my usual trocar (1½ inches long) failed to reach the interior of the chest, and the thinnest, most emaciated of women, have all alike been operated on. In a pregnant woman I tapped four times before and five times after delivery, and finally made a permanent opening: she lived many years afterwards in comparative comfort. In the case of my fat patient, I had simply to get a new and longer trocar, and success followed.

"My only criteria for judging as to the propriety of operating in any cases are the questions—

"Is the dyspnoea severe enough?

"Has it occurred, even once, so severely that in the eyes of attendants it has seemed to threaten life even momentarily?"

"Or, finally, has sufficient time elapsed for remedies to have effect without such effect being produced?"

"But, *fourth*, on this question of time, I fear I may not be able to satisfy either myself or you. I will, however, make one broad statement, viz., whenever I hear that a temporary orthopnoea has occurred, or that a severe dyspnoea is actually present, I never think of waiting, but *operate instantly*, however serious and complicated all the other signs may be. But if a patient has been ill only a few days or a week; if the effusion be small, the dyspnoea but slight; if remedies seem to be having a beneficial effect, I have hitherto, and I presume I may hereafter, let the fluid remain three or four weeks, perhaps, before *urging* an operation. My past experience has been in this direction, although perhaps I have erred in not doing as you suggest in the article already cited, viz., in not operating immediately after finding fluid effused even to a moderate amount. My reason does not give me valid grounds for delay, and certainly my experience of the effects of the operation suggests nothing but that pleasant results would follow it whenever performed. I think, therefore, we *may* operate in any case where the quantity of fluid is obviously so large as to seriously obstruct the greater part of a lung, as, for example, when the level of the fluid seems to rise to the middle of the back, and in so doing oppresses the respiratory murmur in the entire organ. But in such a case, if it did not cause serious symptoms, I might defer to the patient's wishes for a time, and delay the operation a few weeks.

"*Fifth*.—The character of the fluid, though it has at times influenced my prognosis, has never completely foiled me in the use of the exploring canula. Provided the operator steadily draws and does not interrupt the course of the fluid, coagulation can hardly take place in the minute instrument. Pus as thick as honey, and which required a little time to come to a level in the receiving basin, I have drawn through it. It is true, however, that on a few occasions (usually when first introducing the canula) I have been unable to draw out what I subsequently found to be serum. I have tried sometimes the throwing in (by reversing the operations of the pump) of a half-ounce, or less, of lukewarm water. This sometimes has removed the lymph (I presume) that obstructed the end of the canula, and the subsequent attempts to draw fluid have been successful. If, however, the obstruction has still continued, the withdrawal of the instrument becomes necessary, and the reintroduction in the intercostal space just above the previous point of puncture has always succeeded.

"*Sixth*.—Any '*valvular opening*' of the parietes, when using the trocar or in the common surgical operation, seems to me, in the light of my experience, worse than useless—absolutely bad. It is wholly uncalled for with the '*aspirator*' canula; and when an incision is made, it is impossible, in subsequent daily dressings of the wound and washings out of the pleura, to prevent the admission of air. It does harm by its liability to form a sinuous fistulous opening in the chest whereby the ribs may become eroded. Moreover, the *free* exit of pus is prevented by it, and phthisis is more likely to set in.

"*Seventh*.—When and how ought a permanent opening to be made? A decision on this point is often very difficult. Let me name a few favouring circumstances.

"(a) Youth is much more favourable than advanced life.

"(b) The length of time the disease has lasted, if short, is favourable, because it leads us to hope for an easy and early expansion of the compressed lung. If many months have elapsed since the disease began, we can have rather less hope. But mere length of time, however long, should not prevent us from making it, provided the operation seems called for by urgent symptoms.

"(c) Uncomplicated pleuritic effusion is, of course, more favourable than when the patient suffers also from other diseases.

"Hence I incline to make a permanent opening in a young or middle-aged generally healthy subject, one who has been ill but a short time. Moreover

he must have been operated on at least once with the "aspirator," and pus must have been drawn. Moreover, this pus must show a tendency to reaccumulate rapidly. In such a case, and with serious symptoms supervening on the return of the effusion, a permanent opening may be made, I think, with a good hope of success, provided the subsequent treatment be also wise.

"On the contrary, a person above middle life, who has been long ill and afflicted with cough and other symptoms of phthisis, is one in whose case, until very lately, I should have preferred repeated tapplings with the 'aspirator,' for I have feared the risk of hectic fever setting in under the influence of the constant drain of a long flow of pus. I frankly confess to a grave suspicion whether I have not erred in some of these cases; for certainly, though few have eventually *wholly* recovered, yet their lives have been lengthened and made more tolerable by the operation.

"But there is a class of intermediate cases between these two extremities, which at times bitterly tests a man's powers of exact differential diagnosis or prognosis. All that can be said is, that each case must be minutely and accurately examined, and the question of making a permanent opening decided only after a searching analysis of all the circumstances connected with it. While serous fluid is drawn by the 'aspirator,' I think we should not be justified in making a permanent opening with the absolute certainty that pus will soon be formed. Upon this question, however, we need facts.

"Blood, unless it be in the chest from an external injury, and needing a surgical operation for its removal, should always contra-indicate a permanent opening; for, in my experience, a bloody fluid at the *first tapping* has always indicated serious, and generally malignant disease of the lung or pleura, and therefore a permanent opening seems contra-indicated.

"*Eighth.*—How shall a permanent opening be made? Formerly I used silver tubes. At times I have used those of gum elastic. One patient contrived for himself a spiral silver-plated wire tube. This he found easier than either of the others. The silver tubes are painful. Those of gum elastic have, at times, broken off into the pleural cavity. I know of one case, under the care of a professional associate, in which this accident caused great suffering. Moreover, all such tubes, of whatever substance made, are liable to become clogged. Very evil results also may follow, unless great care be taken. For example, although there may seem to be a daily free discharge of pus, a quantity of it may accumulate *below* the point at which the tube enters the chest, and there become semi-solid and fetid. The possible consequences of this state of things, as actually occurred in one of my own patients, are hectic fever and many of the symptoms of phthisis. In the case alluded to they continued to increase until I began thoroughly to wash out the cavity with warm water, and the removal was made by this means of a large quantity of very fetid pus. Relief to all unfavourable signs immediately supervened, with ultimate recovery of the patient. When, therefore, hereafter I shall have made up my mind that a permanent opening is needed to prevent the constant reaccumulation of pus, my reason, and the small but very satisfactory result in two cases in which that operation has been done by free incision through an intercostal space, will induce me to advise that proceeding rather than the use of any tube or trocar, however large. That incision I should generally advise should be made low in the back instead of in front as advised formerly in books of surgery. The dissection should be made carefully down to the pleura, and the cavity laid open to the extent of at least two inches, perhaps more, provided the free exit of pus can be made more thorough. I shall make no effort to keep out the air by valvular openings, because I know I cannot prevent it from entering, and because I believe it will do no harm—certainly much less harm than any contrivance which, while trying to exclude air, prevents the free passage of all fluids out. I shall have that aperture kept freely open by lint until the cavity has fully healed from the interior, if that be possible. I shall use, from the second or third day, simple warm water or carbolized water injections into the pleura; and I shall let all fluids drain into a large poultice, or mass of cotton wadding, placed on the chest."

Two Nævi cured by Monsel's Solution applied externally.—Dr. GEIGER, of St. Joseph's, Mo., reports (*Am. Practitioner*, April, 1873) the case of a male child, aged nine months, who had at birth a "mother's mark" on his perineum and over the pit of his stomach. They were at first flat but slightly elevated spots, and quite small. When the patient was about six months old, however, the tumours took on a very rapid growth; that on the perineum occupying not only the entire perineum, but a portion of the scrotum also, while that on the abdomen was an inch in diameter. The perineal nævus was kept constantly irritated by the child's diaper, his urine, and his feces, and on more than one occasion bled considerably. The mother positively refused her consent to any other procedure than one which consisted in some external application. Dr. G. determined, therefore, to try the methodical use of Monsel's solution to both the growths. Making a mixture of equal parts of the liq. ferri persulph. and glycerine, he painted not only the nævi themselves thoroughly with this, but applied it also for some lines beyond to the healthy skin, and directed it to be repeated twice daily. In a week both tumours had diminished appreciably in size; and in less than one month from the date of the first application of the iron they had disappeared altogether.

Abscess of the Larynx in young Children.—Dr. JOHN S. PARRY describes (*Phila. Med. Times*, June 14th, 1873) two interesting cases of this rare disease, which came under his notice in his wards in the Philadelphia Hospital.

CASE I. John L., æt. 4½ months, negro, well nourished, wet-nursed by his mother, who is healthy. The mother called his attention to the child, who had been irritable and cross she said for two or three days. He had not nursed well, though she did not observe any difficulty in swallowing. During the preceding day he had suffered from difficulty in breathing, with noisy inspiration, and total inability to swallow.

At the time of the examination he was lying upon his mother's lap, with his head thrown back. The muscles of the back of the neck were rigid; eyes prominent; respiration exceedingly laborious, and attended with vigorous movements of the alæ nasi; inspiration long, difficult, and stridulous. During inspiration the base of the thorax was surrounded by a transverse constriction. This disappeared during expiration, which was easy and noiseless. The voice was almost whispering, and his cry almost suppressed. The dyspnœa was so great as to prevent any attempt at crying or moving. He had no cough. The larynx was thrust forward so as to form a decided tumor in the neck. The anterior margin of the thyroid cartilage was sharply defined. There was some swelling upon either side of the larynx, at the posterior margin of the thyroid cartilage. It did not fluctuate. The examination gave rise to pain and uneasiness, but did not increase the dyspnœa. The boy was totally unable to nurse or to swallow either fluids or soft solids.

The chest was resonant on percussion. No râles could be heard in any part of it. The respiratory murmur was scarcely audible. His tongue was furred, and the mouth filled with mucus. A careful inspection of the pharynx revealed no disease, and an examination with the finger showed that there was not a retro-pharyngeal abscess. The epiglottis and parts around were examined with the finger and did not appear to be œdematous. This greatly increased the dyspnœa, and nearly cost the child his life. The patient was carefully watched, with directions not to allow him to die without the operation of tracheotomy having been performed. Warm poultices were applied to the throat to favour suppuration, under the impression that there was an abscess behind the larynx.

During the succeeding two days the prominence of the larynx increased, while the swelling extended from behind forwards. At this time it was thought that there was slight fluctuation near the median line, over the thyroid cartilage. An incision was made from the superior to the inferior margin of this, directly in the median line, and nearly two fluidrachms of thick yellow pus flowed out. The larynx immediately receded, the swelling disappeared, the intense dyspnœa and dysphagia ceased at once. From that moment recovery commenced, and there was not a symptom of disease afterwards.

CASE II. Boy æt. 9 weeks, healthy when born, but when less than a week

old he was attacked with erysipelas of the buttocks, which gradually spread upward until the whole of the body and head were affected. This was followed by an abscess over the upper part of the occipital bone, near the posterior fontanelle. The contents of this were withdrawn by the aspirator twelve days before the present disease began, and again ten days before. The abscess immediately refilled, and it was opened with a knife three days ago. The erysipelas exhausted the child greatly, but during the last month he has been improving. The present illness began suddenly ten days ago, with a wheezing in his throat. This was accompanied by some swelling about the larynx, and some noise in breathing. These symptoms continued until last evening.

Present Condition.—Lies with his eyes half closed and his head thrown back, as in commencing opisthotonos. The muscles on the back of the neck are rigid and tense.

The *alae nasi* move rapidly in breathing. The external muscles of respiration are called into use, those of the neck acting violently. The sternum is arched forward. During inspiration the convexity of this bone is increased, and a deep gutter appears around the base of the chest, on a line with the ensiform cartilage. During expiration this disappears, so that the thorax is actually larger during the expiratory than during the inspiratory act. Breathing from forty to fifty, irregular. Inspiration extremely difficult, prolonged, and attended with a sharp stridulous sound which can be heard all over the ward. Expiration easy and noiseless; but little cough. The sound is hoarse, broken, and tends to become whispering. Cry nearly suppressed, but aphonia not quite complete. The thorax everywhere resonant on percussion, and auscultation reveals no evidences of disease of the lungs. Respiratory murmur inaudible; laryngeal sound heard by transmission over the whole of the surface of the chest.

Physical examination of the pharynx reveals no tumour; epiglottis can be distinctly felt, and there seems to be a little puffiness upon either side of its base. The examination produced much uneasiness, and was followed by profound dyspnoea; larynx thrust forward so as to produce a decided prominence on the anterior surface of the neck; some swelling just over the posterior margins of the thyroid cartilage; no fluctuation. The examination causes pain.

Tongue furred, mouth filled with dense opaque mucus, stomach irritable, and bowels constipated. Has considerable difficulty in swallowing, and cannot nurse at all; pulse weak, irregular, and from 140 to 160. The irregularity occurs during inspiration.

He continued to grow worse during the succeeding night, and died the next day of dyspnoea.

Post-mortem.—Pharynx perfectly healthy; larynx removed with the tongue and upper part of the trachea. The anterior aspect presented the following appearances: In the middle line and a short distance to either side, bounded by the inner border of the sterno-thyroid muscles, there was distinct fluctuation. Posteriorly to the outer margins of the same muscles, and upon either side, were other fluctuating swellings. The two projections communicated, and an impulse was transmitted from the surface of one to all the others; epiglottis erect, thin, and pale; cavity of the larynx nearly obliterated; contained no false membrane, and the mucous membrane was pale and healthy. Immediately without the epiglottis, between its base and the superior inner margin of the thyroid cartilage, were two fluctuating swellings, one upon either side. These compressed the epiglottis so that its lateral margins were nearly in contact and likewise nearly obliterated the rima glottidis. Fluctuation was communicated from these swellings to those on the sides and the centre of the anterior outer surface of the organ.

Upon making an incision in the median line, over the prominence of the thyroid cartilage, more than two drachms of thick yellow pus flowed out. The fluctuating prominences on the exterior and interior of the larynx immediately collapsed, and the cavity of the organ was restored to its natural size. A probe could be passed through the incision backwards, and around the posterior margins of the thyroid cartilage, upon either side, so as to put the mucous membrane of the interior of the larynx upon the stretch at any point. Perichondrium was separated from the thyroid cartilage upon both its inner and outer

surfaces. Both surfaces were eroded and rough, while its tissue was softer than when healthy. Cricoid cartilage perfectly healthy. Other organs of the body healthy.

The prognosis of this disease of the larynx, Dr. P. remarks, is evidently very serious, and to save the patient the treatment must be prompt and efficient. As soon as it is suspected, the child must be carefully watched. In the first case a free incision from the upper to the lower margin of the thyroid cartilage was followed by instantaneous relief and complete recovery. In the second the same result would probably have followed if we had boldly plunged the bistoury in. If the abscess can be opened in the median line, it should be done; and if not, the incision must be made upon a line with the posterior border of the thyroid cartilage, though it is true that in this locality some care has to be exercised, as the incision has to be made close to large vessels.

If this does not give relief, only one course is open—that is, to perform tracheotomy, with the hope that the life of the patient may be prolonged until the pus is discharged. Any one who has seen a case of this kind can have no doubt in regard to the propriety of such a proceeding.

Reclamation by L. A. Dugas, M.D., Prof. of Surgery in the Medical College of Georgia.

AUGUSTA, GA., May 10th, 1873.

To the Editor of the American Journal of the Medical Sciences.

I find in looking over the last edition of Professor Gross's great work upon Surgery that my diagnosis in dislocations of the shoulder is incorrectly stated, and I therefore beg leave to make a correction through the pages of your valuable Journal.

The statement of my views on the subject may be found in the *Southern Medical and Surgical Journal*, published in this city in March, 1856, p. 131, and also in the *Transactions of the American Medical Association* for 1857. The following is my language:—

"If the fingers of the injured limb can be placed by the patient or by the surgeon, upon the sound shoulder while the elbow touches the thorax, there can be no dislocation; and if this cannot be done, there must be a dislocation. In other words, it is physically impossible to bring the elbow in contact with the sternum or front of the thorax if there be a dislocation; and the inability to do this is proof positive of the existence of dislocation, inasmuch as no other injury of the shoulder joint can induce this disability."

This is very plain, and yet Prof. Gross, on page 69 of vol. ii., says, "Another sign, although not an infallible one, first pointed out by Dr. Dugas, of Georgia, is the inability which the patient experiences in touching the sound shoulder with the hand of the injured limb." Now, it is evident that Prof. Gross, inadvertently I am sure, leaves out one of the essential elements of my diagnosis, by the omission of the condition upon which rests the inability to touch the sound shoulder with the hand of the injured limb; that is to say, that the elbow shall touch the front of the thorax. Prof. G. is unquestionably right in pronouncing the diagnosis as stated by him "not an infallible one;" but, I respectfully insist that it is infallible as announced in my publications.

I have no personal aspirations to gratify by making this reclamation, but do so in order to vindicate the claims of American surgery. New elements of diagnosis, especially when based upon unerring physical laws, have been ever since the days of Laennec regarded as among the most valuable contributions to medical knowledge, inasmuch as they alone can lead us to sound practical deductions. If there be any merit in my diagnosis, let our country have the credit that may attach to it.

Yours very respectfully,

L. A. DUGAS.